

Amendment to the Abstract:

Kindly insert the Abstract, which is attached as a separate sheet to this Amendment,
as a separate page of the present application.

Abstract

The present invention relates to an apparatus to dispense a sample for subsequent electrospray ionisation (ESI) mass spectrometry (MS) analysis, to a method of fabricating such apparatus and to applications of such apparatus in biological and chemical analysis. The apparatus consists of an electrically non-conductive substrate comprising at least two covered microstructures (generally microchannels) having one extremity formed at the edge of the substrate, one of said microstructures containing the sample to be dispensed into a mass spectrometer by electrospray ionisation and at least a second of said microstructure containing a fluid used as sheath liquid or sheath gas, said at least two microstructures being formed in such a manner that the sample and the sheath liquid/gas come in contact to each other and/or are mixed directly in the Taylor cone of the spray.